

FACT SHEET

as required by LAC 33:IX.3109 for major LPDES facilities, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0039802; AI 19813; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. THE APPLICANT IS:** Town of Delhi
Delhi Municipal Sewage Treatment Plant
P.O. Box 277
Delhi, LA 71232
- II. PREPARED BY:** Rachel Davis
- DATE PREPARED:** January 29, 2010
- III. PERMIT ACTION:** revoke and reissue LPDES permit LA0039802, AI 19813, PER20090001

EPA has not retained enforcement authority.

LPDES permit issued: November 1, 2005

LPDES permit expires: October 31, 2010*

*The Town of Delhi will be upgrading their facility from 0.7 MGD to 2.0 MGD to accept wastewater from a ConAgra Sweet Potato Processing Facility. This upgrade moves their permit status from a minor permit to a major permit. Therefore, the previous permit will be terminated upon issuance of this permit.

IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Delhi.
- B. The permit application does indicate the receipt of industrial wastewater.
- C. The facility is located on 567 J.M. Graves Rd, in Delhi, Richland Parish.
- D. The treatment facility consists of a lift station and flow measurement facilities at Lamb Weston plant, approximately 6 miles of sewer force main, inlet bar screen, oxidation ditch, final clarifier, chlorination, dechlorination, post aeration and flow measurement.
- E. Outfall 001
 - Discharge Location: Latitude 32° 26' 12" North
Longitude 91° 28' 27" West
 - Description: treated sanitary wastewater
 - Design Capacity: 2 MGD

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Type of Flow Measurement which the facility is currently using:
V-Notch Weir with Continuous Recorder

V. RECEIVING WATERS:

The discharge is into a concrete effluent channel, thence into Bayou Macon in segment 081001 of the Ouachita River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10), for the purpose of limit calculations, is 24 cfs based on a report from Todd Franklin dated November 3, 2009.

The **hardness value** is 135.31 mg/l and the **fifteenth percentile value for TSS** is 24 mg/l based on a report from Todd Franklin dated November 3, 2009.

The designated uses and degree of support for Segment 081001 of the Ouachita River Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Full	Full	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 081001 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 081001 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated January 11, 2010 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

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VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Rachel Davis
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 081001 was previously listed as impaired for pathogen indicators, pesticides, and turbidity/suspended solids, for which the below TMDLs have been developed. The LDEQ reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDLs have been established for subsegment 081001:

Bayou Macon TMDL for Fecal Coliform

As per the Bayou Macon Fecal Coliform TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, Fecal Coliform effluent limitations will be permitted according to current state policy.

Total Maximum Daily Load (TMDL) for Selected Pesticides in the Ouachita River Basin

As per this TMDL, "there are no known point sources for carbofuran, DDT, methyl parathion, or toxaphene in Big Creek, Boeuf River, Joe's Bayou, Macon Bayou, or the Tensas River watersheds; therefore, the WLA will be set to zero." Therefore requirements for these pesticides shall not be placed into this permit.

Total Maximum Daily Load (TMDL) for TSS, Turbidity, and Siltation for 13 Subsegments in the Ouachita River Basin

As per the TMDL for TSS, Turbidity, and Siltation for 13 Subsegments in the Ouachita River Basin, "Point sources do not represent a significant source of TSS as defined in this TMDL. Because an enforceable mechanism is in place to protect from discharges of organic suspended solids, no TMDL is required for these materials." Therefore, TSS limitations shall be placed into the permit according to the current state policy.

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Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective two years after the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	166.8	10 mg/l	15 mg/l	Limits are set in accordance with the previous permit and the Statewide Sanitary Effluent Limits Policy (SSELP)
TSS	250.2	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

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3) **Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) **Total Residual Chlorine**

If chlorination is used to achieve the limitations for Fecal Coliform Bacteria, the effluent shall contain NO MEASURABLE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, No MEASURABLE will be defined as less than 0.1 mg/l of chlorine. Limits set in accordance with the Water Quality Screen (see Appendix B-1) and the previous LPDES permit.

5) **Toxicity Characteristics**

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, October 7, 2009, VERSION 7).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0039802, **Biomonitoring Section** for the organisms indicated below.

TOXICITY TESTS

FREQUENCY

Chronic static renewal 7-day survival & reproduction test
using Ceriodaphnia dubia (Method 1002.0)

1/quarter

Chronic static renewal 7-day survival & growth test
using fathead minnow (Pimephales promelas) (Method 1000.0)

1/quarter

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be **5%, 6%, 9%, 11%, and 15%**. The low-flow effluent concentration (critical low-flow dilution) is defined as 11% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the **Biomonitoring Section** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in the **Biomonitoring Section** of the permit.

The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2383. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act

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X. PREVIOUS PERMITS:

LPDES Permit No. LA0020141: Issued: November 1, 2005
Expires: October 31, 2010

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD ₅	10 mg/l	15 mg/l	1/week	3-Hr Comp
TSS	15 mg/l	23 mg/l	1/week	3-Hr Comp
Fecal Coliform Colonies	200	400	1/week	Grab

The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning **January 2007** and ending **June 2009** for this facility.

Date: January 24, 2007

Inspector: Madelon Carter

Findings and/or Violations:

1. The design flow of 0.70 MGD was exceeded for 2/06, 3/06, 4/06, 5/06, 7/06, 10/06, 12/06.
2. There was an unauthorized discharge from the last inspection 2/24/06 which occurred on 4/18/06.
3. The pH holding times could not be verified, whereas the sample times and analysis times were not being recorded
4. There were no percentage error/flow checks being performed to determine the accuracy of the secondary flow device
5. There was no certification for the secondary flow device present.

B) Compliance and/or Administrative Orders

A review of the files indicates that no compliance orders have been issued against the facility

C) DMR Review

A review of the discharge monitoring reports for the period beginning **June 2007** through **June 2009** has revealed the following violations:

<u>Period of Excursion</u>	<u>Parameter</u>	<u>Outfall</u>	<u>Permit Limit</u>	<u>Reported Quantity</u>
July 2007	TSS	001	15 mg/l	16 mg/l
	TSS		23 mg/l	31 mg/l
	TSS (mass)		87 lbs/day	91 lbs/day
May 2009	BOD	001	15 mg/l	22 mg/l

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Although flow is a report parameter and is not considered a violation of the DMR the following table shows the flows that exceeded the facility's previous design capacity of 0.70 MGD.

Period of Excursion	Parameter	Outfall	Reported Quantity
July 2007	Flow	001	10.5 MGD*
August 2007	Flow	001	0.83 MGD
September 2007	Flow	001	0.83 MGD
October 2007	Flow	001	0.98 MGD
December 2007	Flow	001	1.07 MGD
February 2008	Flow	001	10 MGD*
March 2008	Flow	001	0.75 MGD
April 2008	Flow	001	0.97 MGD
August 2008	Flow	001	0.98 MGD
September 2008	Flow	001	14 MGD*
October 2008	Flow	001	0.75 MGD
December 2008	Flow	001	11 MGD*

*These could possibly be a decimal error.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

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Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 2 MGD.

Effluent loadings are calculated using the following example:

BOD: $8.34 \text{ lb/gal} \times 2 \text{ MGD} \times 10 \text{ mg/l} = 166 \text{ lb/day}$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 1.0 and 5.0 MGD.

Effluent Characteristics

Flow
BOD₅
Total Suspended Solids
Fecal Coliform Bacteria
pH

Monitoring Requirements

<u>Measurement Frequency</u>	<u>Sample Type</u>
Continuous	Recorder
2/week	3-Hr Comp
2/week	3-Hr Comp
2/week	Grab
2/week	Grab

Pretreatment Requirements

Due to the absence of pretreatment categorical standards for the indirect discharges listed above or because the discharge is of sanitary wastewater only, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0039802. This language is established for municipalities that do not have either an approved or required Pretreatment program.

This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgement (BPJ) of the reviewer.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to revoke and reissue a permit for the discharge described in this Statement of Basis.

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XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Delhi, Delhi Municipal Sewage Treatment Plant, October 16, 2009

Invoice No. _____

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**LOUISIANA WATER POLLUTION CONTROL FEE SYSTEM
RATING WORKSHEET**

PERMIT NO: LA0039802; AI 19813; PER20090001

- 1 a. Company Name: Town of Delhi
b. Facility Name: Delhi Municipal Sewage Treatment Plant
2. Local Mailing Address: P.O. Box 277
Delhi, LA 71232
3. Billing Address (If different):
4. Facility Location: 567 J. M. Graves Rd
a. Parish: Richland
5. Facility Type: privately owned treatment works
a. Treatment Process Used: lift station and flow measurement facilities at Lamb Weston plant, approximately 6 miles of sewer force main, inlet bar screen, oxidation ditch, final clarifier, chlorination, dechlorination, post aeration and flow measurement.
6. Products Produced:
a. Raw materials stored or used:
b. By-products produced:
7. Primary SIC Code: 4952
a. Other SIC Codes:
8. Fac. Manager: J. Lynn Lewis
a. Telephone: (318) 878-3792
9. Owner:
a. Telephone:
10. Env. Contact:
a. Telephone:

11. State Permit No.: a. Date Issued: b. New: Modified:	12. NPDES Permit No. a. Effective Date: b. Expiration Date:
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13. Number and Identification of Outfalls: One, 001
14. Number of Injection Wells:
15. Water Source(s):
16. Receiving Water(s): Bayou Macon

Is receiving water:

- a. Public Water Supply Yes () No (x)
b. Designated Water Quality Limited Yes (x) No ()
c. In Compliance with Water Quality Standards Yes (x) No ()

17. River Basin: Ouachita River 18. Basin Segment No. 081001

Federal Tax I. D. No.: 72-6000332

Initials of Rater: rod

TOTAL RATING POINTS ASSIGNED 30